CLAIMS:

1.   A method of generating a high level design of a distributed system test bed comprising the steps of:

5   defining a meta-model of the test bed;

defining at least two architecture modelling elements within the meta-model to form an architecture model associated with the meta-model;

defining at least one relationship between a pair of architecture modelling elements;

10   defining properties associated with at least one of the architecture modelling elements; and

storing the high level design in computer memory.

2.   A method as claimed in claim 1 wherein at least one architecture modelling

15   element comprises an architecture host.

3.   A method as claimed in claim 1 wherein at least one architecture modelling element comprises an architecture operation host.

20   4.   A method as claimed in claim 1 wherein at least one architecture modelling element comprises an architecture attribute host.

5.   A method of generating a performance test bed comprising the steps of:

defining a high level design of the test bed;

25   generating an XML-encoded architecture design from the high level design; and

applying a set of XSLT transformation scripts to the XML-encoded architecture design to generate test bed code.

6.   A method as claimed in claim 5 further comprising the steps of:

30   applying the set of XSLT transformation scripts to generate program source code and compilation scripts; and

compiling the program source code using the compilation scripts to generate the test bed code.

7.   A method of defining a meta-model of a distributed system test bed comprising the steps of:

defining at least two modelling elements within the meta-model;

defining at least one relationship between a pair of the modelling elements; and

storing the meta-model in computer memory.

8.   A method as claimed in claim 7 wherein at least one modelling element comprises an architecture meta-model host.

9.   A method as claimed in claim 7 wherein at least one modelling element comprises an architecture meta-model operation host.

10.   A method as claimed in claim 7 wherein at least one modelling element comprises an architecture meta-model attribute host.

11.   A method of evaluating a performance test bed comprising the steps of:

defining a high level design of the test bed;

generating an XML-encoded architecture design from the high level design;

applying a set of XSLT transformation scripts to the XML-encoded architecture design to generate test bed code;

deploying the test bed code;

signalling test commands;

collecting test results; and

analyzing the test results to evaluate the performance test bed.

12.   In a computer system having a graphical user interface including a display and a selection device, a method of generating a performance test bed, the method comprising the steps of:

displaying a display panel to a user;

receiving a user selection of two or more modelling elements within a meta-model;

displaying the modelling elements within the display panel;

receiving a user selection for at least one relationship between a pair of the

5   modelling elements;

displaying a representation of the at least one relationship between the pair of modelling elements within the display panel;

receiving a user selection of two or more architecture modelling elements associated with the modelling elements;

10   displaying the architecture modelling elements within the display panel;

receiving a user selection for at least one relationship between a pair of the architecture modelling elements;

displaying a representation of the at least one relationship between the pair of the architecture modelling elements; and

15   applying a set of transformation scripts to the architecture modelling elements to generate test bed code.

13.   A method as claimed in claim 12 further comprising the steps of:

applying the set of transformation scripts to generate program source code and

20   compilation scripts; and

compiling the program source code using the compilation scripts to generate the test bed code.

14.   In a computer system having a graphical user interface including a display and a

25   selection device, a method of generating a high level design of a distributed system test bed, the method comprising the steps of:

defining a meta-model of the test bed;

defining at least two architecture modelling elements within the architecture model to form an architecture model associated with the meta-model;

30   defining at least one relationship between a pair of architecture modelling elements;

defining properties associated with at least one of the architecture modelling elements; and

storing the high level design in computer memory.

5   15.   In a computer system having a graphical user interface including a display and a selection device, a method of defining a meta-model of a distributed system test bed, the method comprising the steps of:

defining at least two modelling elements within the meta-model;

defining at least one relationship between a pair of the modelling elements; and

10   storing the meta-model in computer memory.

16.   A method of adding performance test bed generation capability to a software design tool comprising the steps of:

providing means for defining a high level design of the test bed;

15   providing means for generating an XML-encoded architecture design from the high level design; and

providing means for applying a set of XSLT transformation scripts to the XML-encoded architecture design to generate test bed code.

20   17.   A method of adding high level design generation capability of a distributed system test bed to a software design tool comprising the steps of:

providing means for defining a meta-model of the test bed;

providing means for defining at least two architecture modelling elements within the architecture model to form an architecture model associated with the meta-model;

25   providing means for defining at least one relationship between a pair of architecture modelling elements;

providing means for defining properties associated with at least one of the architecture modelling elements; and

providing means for storing the high level design in computer memory.

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18.   A method of adding performance test bed evaluation capability to a software design tool comprising the steps of:

providing means for defining a high level design of the test bed;

providing means for generating an XML-encoded architecture design from the high level design;

providing means for applying a set of XSLT transformation scripts to the XML-
5   encoded architecture design to generate test bed code;

providing means for deploying the test bed code;

providing means for signalling test commands;

providing means for collecting test results; and

providing means for analysing the test results to evaluate the performance test
10   bed.